


PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference P28362/28847 | | FOR FURTHER ACTION | | See Form PCT/PEA/416 |
| International application No. PCT/EP2004/009114 | | International filing date (day/month/year) 13.08.2004 | | Priority date (day/month/year) 30.09.2003 |
| International Patent Classification (IPC) or national classification and IPC H04L12/56 | | | | |
| Applicant SONY INTERNATIONAL (EUROPE) GMBH et al. | | | | |
| <p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau) a total of 1 sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> | | | | |
| <p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p> | | | | |
| Date of submission of the demand 01.08.2005 | | Date of completion of this report 19.12.2005 | | |
| Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016 | | Authorized Officer Todorut, C Telephone No. +31 70 340-2802 | | |



100575884

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/009114

PCT/EP2004/009114 10 MAR 2006

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
 - ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-29 as originally filed

Claims, Numbers

2-20 as originally filed

1 received on 22.11.2005 with letter of 22.11.2005

Drawings, Sheets

1/4-4/4 as originally filed

Drawings, Figures

1-9 as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:
 - ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
 - ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/EP2004/009114

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|-------------|------|
| Novelty (N) | Yes: Claims | 1-20 |
| | No: Claims | |
| Inventive step (IS) | Yes: Claims | 1-20 |
| | No: Claims | |
| Industrial applicability (IA) | Yes: Claims | 1-20 |
| | No: Claims | |

2. Citations and explanations (Rule 70.7):

see separate sheet

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

10 575 84
JAP20 Rec'd PCT/PTO 20 MAR 2006
International application No.
PCT/EP2004/009114

The application relates to a quality of service (Qos) reservation method for managing network resources and/or service parameters needed for symmetric real-time multimedia applications and/or data services running on a mobile node and a correspondent node by signalling resource control information along specific routing paths between these nodes.

Document D1: US 2003/161322 A1 (SHAHRIER SHARIF M ET AL) 28 August 2003 (2003-08-28), which is considered the closest prior-art, relates to a quality of service (Qos) reservation mechanism which allows the reservation of communications resources in downstream, upstream or even in both directions.

The method of document D1 differs from the method defined in the amended independent claim 1 of the present application in that the prior-art method is based on RSVP out-of band signalled extensions while the present application method relies on a reservation mechanism based on an "in-band signalling".

This technical feature provides a solution wherein no explicit reservation messages are necessary but any other packets can be used in order to carry the reservation information on the fly.

None of the available prior-art documents disclose or suggest such a solution as the application in order to solve the above mentioned problem.

Therefore, independent claim 1 satisfies the conditions of novelty (Article 33(2) PCT) inventive step (Article 33(3) PCT)

Dependent claims 2-20 are dependent on independent claim 1 and as such are, also novel and inventive.

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New Claim 1

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1. A quality-of-service (QoS) reservation method for managing network resources and/or service parameters needed for symmetric real-time multimedia applications and/or data services running on a mobile node (106a) and a
10 correspondent node (106c) by signaling resource control information along specific routing paths between these nodes (106a, 106c),

said method being based on an in-band signaling mechanism comprising the steps of

- 15 - embedding (S1) resource control information to be transmitted between the mobile node (106a) and the correspondent node (106c) in an message (400) which is sent via the routing path of the reserved connection for these nodes (106a+c) and
- 20 - disseminating (S2) resource control information between the mobile node (106a) and the correspondent node (106c) by using the same routing path (alternative #1) through the network (104) in both directions.